Claims:

1. A Method for manipulating samples, in particular tissue samples, wherein at defined positions, samples are punched-out from preparations, in particular prepared tissue specimen by means of needles and said samples are inserted into punched-out holes in sample carriers, characterized in that at least one digital, microscopic image of a section of a preparation is superimposed by a surface image of said preparation und that markings are placed on the superimposed image, which define the desired positions at which the samples are punched-out automatically and inserted into the holes of the sample carriers.

2. The method of claim 1, characterized in that the digital, microscopic images of a section of a preparation consist of several segments, which are assembled prior to superimposing it with the image of the surface of the preparation.

3. The method of claim 1 or 2, characterized in that the digital, microscopic image of a section of a preparation or the segments of the digital, microscopic im-

age is straightened or artefacts eliminated respectively.

4. The method of one of the claims 1 to 3, characterized in that the markings or their coordinates are saved in a database, together with an identifier for the preparation.

5. The method of one of the claims 1 to 4, characterized in that several digital section images can be selected for each preparation.

6. The method of one of the claims 1 to 5, characterized in that the display scale of the section images, surface images or superimposed images respectively, can be modified.

7. The method of one of the claims 1 to 6, characterized in that the orientation of the section images, surface images or superimposed images respectively, can be modified.

8. The method of one the claims 1 to 7, characterized in that the section images, surface images or superim-

posed images respectively, can be displaced.

9. The method of one of the claims 1 to 8, character-
ized in that the colour of the section images, surface
images or superimposed images respectively, can be
modified.

10. The method of one of the claims 1 to 9, character-
ized in that the level of translucency of the surface
images in relation to the section images can be modi-
fied.

11. The method of one of the claims 1 to 10, character-
ized in that the transparency of the section images can
be modified.

12. The method of one of the claims 1 to 11, character-
ized in that a patient-information or equivalent as-
signed to an identifier for the preparation, is dis-
played in combination with the superimposed image.

13. The method of one of the claims 1 to 12, character-
ized in that placed markings are characterized and
preferably numbered consecutively.

14. The method of one of the claims 1 to 13, character-
ized in that placed markings can be selected and
erased.

15. The method of one of the claims 1 to 14, character-
ized in that placed markings can be selected and modi-
fied.

16. The method of one of the claims 1 to 15, character-
ized in that annotations can be assigned to the placed
markings.

17. The method of one of the claims 1 to 16, character-
ized in that sample carriers for the insertion of the
punched-out samples can be assigned to the placed mark-
ings.

18. The method of one of the claims 1 to 17, character-
ized in that specific holes in the sample carriers can
be assigned to the placed markings.

19. The method of one of the claims 1 to 18, character-
ized in that the holes for the samples in the sample

carrier are arranged in a pattern and said pattern is formed by arrangement of the holes in the form of a binary code and that an unambiguous assignment of the samples is possible in this way.

20. The method of one of the claims 1 to 19, characterized in that the position of the surface of the preparations is detected before the sample punching procedure and the detected position values are saved in conjunction with an identifier for the preparations.

21. The method of one of the claims 1 to 20, characterized in that the position of the surface of the sample carriers is detected before the hole-punching procedure and the detected position values are saved in conjunction with an identifier for the sample carriers.

22. The method of one of the claims 1 to 21, characterized in that the punching depth of the sample-punching and hole-punching procedures can be selected and assigned to the markings.

23. The method of one of the claims 1 to 22, characterized in that after the placement of the last marking on

the last preparation the sample-punching procedure is stared automatically.

24. The method of one of the claims 1 to 23, characterized in that the sample-punching procedure can be interrupted and continued.

25. The method of one of the claims 1 to 24, characterized in that all holes are punched-out from the sample carriers before the start of sample-punching procedure.

26. The method of one of the claims 1 to 25, characterized in that the sample-punching needle or hole-punching needle are cleaned at least after several sample-punching procedures or hole-punching procedures respectively.

27. A device for manipulating samples, in particular tissue samples with at least one needle (3) for punching samples from preparations (5), in particular prepared tissue specimen, at defined positions and a control device (13) to control the needle (3), characterized in that a camera (14) to take images of the surface of the tissue specimen (5), furthermore a device

for superimposing the images captured of the preparations (5) with digital, microscopic images of sections of these preparations (5) that have been archived in a storage device (11), furthermore a monitor (12) to display the superimposed images and furthermore a device provided to place markings for the determination of the defined sample-punching positions, which is connected with the control device (13).

28. The device of claim 27, characterized in that a device is provided for the assembly of the digital, microscopic images of sections of the preparations (5), from several segments.

29. The device of claim 27 or 28, characterized in that at least one needle (2) is provided to punch holes (20) in sample carriers (4), into which the punched-out tissue samples are inserted.

30. The device of one of the claims 27 to 29, characterized in that a database (11) is provided, for storing the markings or their coordinates respectively, together with an identifier for the preparation (5) and if need be patient information or equivalent.

31. The device of one of the claims 27 to 30, characterized in that a device is provided to alter the display scales of the section images (9), the surface images and/or the superimposed images.

32. The device of one of the claims 27 to 31, characterized in that a device is provided to change the orientation of the section images (9), surface images and/or the superimposed images.

33. The device of one of the claims 27 to 32, characterized in that a device is provided to displace the section images (9), surface images and/or superimposed images.

34. The device of one of the claims 27 to 33, characterized in that a device is provided to change the colour of the section images (9), surface images and/or superimposed images.

35. The device of one of the claims 27 to 34, characterized in that a device is provided to change the level of translucency of the surface images in relation

to the section images (9).

36. The device of one of the claims 27 to 35, characterized in that a device is provided to change the transparency of the section images (9).

37. The device of one of the claims 27 to 36, characterized in that the device for placing the markings to determine the defined punch positions is represented by a computer mouse (17).

38. The device of one of the claims 27 to 37, characterized in that a device is provided for detecting the position of the surface of the sample carriers (4) and/or preparations (5).

39. The device of claim 38, characterized in that a storage device (11) is provided for the detected position values of the sample carriers (4) or preparations respectively.